REMARKS

Claims 1-40 are pending in the present application. The Examiner has required restriction to one of the following inventions under 35 U.S.C. §121:

I. Claims 1-15, 19-20, 22-23, 26-28 and 31-40, drawn to methods for making a transformed plant, a DNA construct comprising a plant promoter, and a transformed plant and plant cell, classified in class 800, subclass 298, for example.

II. Claims 16-18, 21, 24-25 and 29-30, drawn to a DNA construct, a vector, a cell and a chimeric polynucleotide, classified in class 435, subclass 320.1, for example.

Applicants provisionally elect the invention of Group I, claims 1-15, 19-20, 22-23, 26-28 and 31-40, with traverse, and request reconsideration of this restriction requirement in view of the following remarks.

The Examiner has also required restriction to one of the inventions (A)-(I) under 35 U.S.C. §121:

(A) SEQ ID NOS: 1 and 2

(B) SEQ ID NOS: 3 and 4

(C) SEQ ID NOS: 5 and 6

(D) SEQ ID NOS: 7 and 8

(E) SEQ ID NOS: 9 and 10

(F) SEQ ID NOS: 11 and 12

(G) SEQ ID NOS: 13 and 14

(H) SEQ ID NOS: 15 and 16

(I) SEQ ID NOS: 17 and 18

Applicants provisionally elect the invention of Group A, with traverse, and request reconsideration of this restriction requirement in view of the following remarks.

Applicants respectfully request that the Examiner withdraw the restriction requirement as between Groups I and II and that the Examiner withdraw the restriction requirement as between Groups (A)-(I).

With respect to the requirement as between Groups I and II, Applicants submit that a prior art search directed to claims of either Group 1 or Group II is believed to necessarily include a search of subclasses that would be considered likely to include prior art related to the claims of the other group. Applicants therefore submit that the examination of the claims in Groups I and II together would not be a serious burden because there will be significant overlap in searching the subject matter of these claims.

The Manual of Patent Examining Procedure ("MPEP") recognizes that applications claiming more than one invention can often be examined without serious burden, and the MPEP requires examiners to examine claims that recite distinct inventions in a single application if doing so would not impose a serious burden. In this regard, the MPEP states that: "If the search and examination of an entire application can be made without serious burden, the examiner must

examine it on the merits even though it includes claims to independent or distinct inventions." MPEP § 803 (emphasis added).

Applicants submit that the Examiner has not shown how examination of the claims of Groups I and II together would be a serious burden, and Applicants submit that it would not be a serious burden for the reasons set forth above. Without such burden, the MPEP requires that the claims be examined in one application on their merits. Applicants therefore respectfully submit that it would be proper for the Examiner to withdraw the restriction requirement as between the claims of Groups I and II, and Applicants respectfully request the Examiner to do so.

With respect to the requirement as between Groups (A)-(I), Applicants submit that this requirement is improper because each of Groups (A)-(I) represents a species of a properly defined genus. In support of this restriction requirement, it is stated in the outstanding Action that:

> nucleotide sequences encoding different amino acid sequences are structurally distinct chemical compounds and are unrelated to one another... Absent evidence to the contrary, each such nucleotide and amino acid is presumed to represent an independent and distinct invention, subject to a restriction requirement... This requirement is not to be construed as a requirement of an election of species, since each nucleotide and amino acid sequence is not a member of a single genus of invention, but constitutes an independent and patentably distinct invention... [T]he different inventions represent structurally different polynucleotides and the polypeptides they encode.

(Action, page 3). In contrast to the assertions made in the Action, Applicants submit that the sequences grouped by the Examiner into Groups (A)-(I) are in fact species of a properly defined genus. With reference to the pending claims, Applicants would draw the Examiner's attention to claim 8, which recites a proper genus in the "Markush group" format as follows:

> the GAD enzyme comprises an amino acid sequence selected from the group consisting of the sequence set forth in SEQ ID NO: 2; the sequence set forth in SEQ ID NO: 4; the sequence set forth in SEQ ID NO: 6; the sequence set forth in SEQ ID NO: 8; the sequence set forth in SEQ ID NO: 10; the sequence set forth in SEQ ID NO: 12; the sequence set forth in SEQ ID NO: 14; the sequence set forth in SEQ ID NO: 16; the sequence set forth in SEQ ID NO: 18 and a sequence having at least about 60% identity thereto that is effective to catalyze a reaction of glutamic acid to GABA.

This format has been universally acknowledged as an acceptable manner of defining an invention where members of the Markush Group (1) share a common utility and (2) share a substantial structural feature disclosed as being essential to that utility. (See MPEP § 2173.05(h)). Applicants would note that the amino acid sequences set forth as SEQ ID NOs: 2, 4, 6, 8, 10, 12, 14, 16 and 18 each have identities of greater than 70% to one another, determined using the MacVector program and parameters set forth at page 21 of the present specification. In view of this high level of structural identity, together with relatedness of function (claim 8 recites functionality thereof as: "effective to catalyze a reaction of glutamic acid to GABA."), Applicants submit that the sequences identified above are properly considered to be species of the recited genus. Applicants therefore submit that restriction therebetween is improper. Applicants further submit that this same reasoning applies to the nucleotide sequences that encode the above-referenced amino acid sequences.

CLOSURE

In view of the above, Applicants respectfully submit that it is proper to withdraw the restriction requirement as between Groups I and II, and to also withdraw the restriction requirement as between Groups (A)-(I). Applicants further submit that the claims of the present application are in condition for allowance. Action to that end is respectfully requested. If there are any remaining issues that can be addressed telephonically, the Examiner is invited to contact the undersigned to discuss the same.

Respectfully submitted,

By_____

Gregory B. Coy, Reg. No. 40,967
Woodard, Emhardt, Moriarty,
McNett & Henry LLP
Bank One Center/Tower
111 Monument Circle, Suite 3700
Indianapolis, IN 46204-5137
(317) 634-3456 Telephone
(317) 637-7561 Facsimile